

### Amendments to the Claims

31 1. (Currently Amended) A semiconductor memory device comprising:

a plurality of memory cells corresponding to an address space larger than  $2^n$  and smaller than  $2^{(n+1)}$ , where n is a positive integer;

an invalid address detecting circuit for detecting that an address signal supplied from exterior indicates an address space other than said address space; and

an invalid signal outputting circuit for outputting an invalid signal to the exterior of the semiconductor memory device when said invalid address detecting circuit carries out said detection, ~~thereby notifying a system unit accessing the semiconductor memory device of the detection; and~~

an output controlling circuit for outputting, when said invalid address detecting circuit carries out said detection in a read operation, a data signal having been accessed and read in advance.

2. (Cancelled)

3. (Currently Amended) A semiconductor memory device according to ~~claim~~ 2, claim 1, further comprising an output circuit for receiving a read data signal from said memory cells and

continuously outputting the ~~received data~~ received in advance to the exterior, according to a control by the output controlling circuit when said invalid address detecting circuit carries out said detection in said read operation.

4. (Cancelled)

5. (Currently Amended) A semiconductor memory device comprising:

B | a plurality of memory cells corresponding to an address space larger than  $2^n$  and smaller than  $2^{(n+1)}$ , where n is a positive integer;

an invalid address detecting circuit for detecting that an address signal supplied from exterior indicates an address space other than said address space; and

an output controlling circuit for outputting, when said invalid address detecting circuit carries out said detection in a read operation, a data signal ~~read in a read operation cycle immediately preceding said read operation~~ having been accessed and read in advance.

6. (Currently Amended) A semiconductor memory device according to claim 5, comprising an output circuit for receiving a read data signal from said memory cells and

continuously outputting the ~~received~~ data received in advance to the exterior, according to a control by the output controlling circuit when said invalid address detecting circuit carries out said detection in said read operation.

7. (Previously Presented) A semiconductor memory device according to claim 1, further comprising:

a command controlling circuit for carrying out a write or an erase operation in said memory cells in response to a command input from the exterior, wherein

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said command controlling circuit invalidates said command input to thereby prohibit the write or the erase operation, when the invalid address detecting circuit detects that the address signal supplied from exterior as the command input indicates the address space other than the said address space.

8. (Cancelled)

9. (Currently Amended) A method of controlling a semiconductor memory device comprising a plurality of memory cells corresponding to an address space larger than  $2^n$  and small than  $2^{(n+1)}$ , where n is a positive integer, said method comprising the step of:

outputting an invalid signal to the exterior of the semiconductor memory device and outputting a data signal having been accessed and read in advance, when an address signal supplied from the exterior indicating an address space other than said address space has been detected, ~~thereby notifying a system unit accessing the semiconductor memory device of the detection.~~

10. (Previously Presented) A method of controlling a semiconductor memory device according to claim 9, further comprising the steps of:

automatically carrying out a write or an erase operation in said memory cells in response to a command input from the exterior

invalidating the command input thereby prohibiting the write or the erase operation, when the address signal supplied from the exterior indicating the address space other than the said address space has been detected.

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and

11. (Previously Presented) A semiconductor memory device according to claim 1, further comprising:

a decoder which decodes said address signal, and is inactivated when said invalid address detecting circuit carries out said detection.

12. (Previously Presented) A semiconductor memory device according to claim 1, further comprising:

a sense amplifier which amplifies a data signal read from the memory cells, and is inactivated when said invalid address detecting circuit carries out said detection.